UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,643	01/15/2004	KahHing Ting	STL11217	5810

7590   08/05/2008

Fellers, Snider, Blankenship,
Bailey & Tippens, P.C.
Suite 1700
100 North Broadway
Oklahoma City, OK 73102-8820

EXAMINER
STACE, BRENT S

ART UNIT	PAPER NUMBER
2161	

MAIL DATE	DELIVERY MODE
08/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/758,643	TING ET AL.
	Examiner	Art Unit	
	BRENT STACE	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2008*.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-17 and 20* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-7,9-17 and 20* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *28 November 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
      Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
      Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   This communication is responsive to the Amendment filed April 21st, 2008.

Claims 1-7, 9-17, and 20 are pending. In the Amendment filed April 21st, 2008, Claims

1, 9, and 11 are amended, Claim 18 is canceled, and Claims 1 and 11 are independent

claims. The examiner acknowledges that no new matter was introduced and the claims

are supported by the specification. This action is made FINAL.

Response to Arguments

2.   Applicant's arguments, filed April 21st, 2008, with respect to Claims 1-7, 9-17,

and 20 have been considered but are moot in view of the new ground(s) of rejection.

3.   The other claims argued merely because of a dependency on a previously

argued claim(s) in the arguments presented to the examiner, filed April 21st, 2008, are

moot in view of the examiner's interpretation of the claims and art and are still

considered rejected based on their respective rejections from at least a prior Office

action (part(s) of recited below).

Response to Amendment

Information Disclosure Statement

4.   The reference on the IDS (dated 1/15/2004) on page 2 identified by U.S. Patent

No. 6,207,022 appears to be a typo since the reference deals with purification of crude

(meth) acrylic acid and the publication data and name on the IDS do not match the U.S.

Patent document matching U.S. Patent No. 6,207,022. The purification of crude (meth)

acrylic acid appears to have no subject matter similar to the present application.

Claim Objections

5.   Claim 1 is objected to because of the following informalities:

   a.   Claim 1 recites the limitation "the conclusion" in line 12. There is

insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 1 recites "that point" in line 14. It is unclear what point

this is referring to in the claimed limitations.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10.   Claims 1-5, 9, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,857,180 (Hallmark et al.) in view of U.S. Patent No. 6,732,100 (Brodersen et al.), further in view of "Operating System Concepts" (Silberschatz et al.).

     For **Claim 1**, Hallmark teaches: "A method for querying a computerized database, [Hallmark, col. 5, lines 10-15] comprising:

*   distributing a desired range of data values to be obtained from the database across a plurality of different query statements, [Hallmark, col. 5, lines 10-15 with Hallmark, col. 6, lines 20-33 with Hallmark, col. 8, lines 12-16] …

*   simultaneously executing the plurality of query statements to access said database and transfer associated data subsets into a memory space [Hallmark, col. 5, lines 10-15 with Hallmark, col. 6, lines 20-33] … and

- arranging the associated data subsets to form the desired range of data values"
  [Hallmark, col. 6, lines 20-33 with Hallmark, col. 5, lines 22-34].
  Hallmark discloses the above limitations but does not expressly teach:

- "…the desired range accessible using a single login account of a computer
  network associated with the database;

- …by logging into the computer network under a different login account for each
  query statement, wherein an auto-brake function is initiated that defines a
  maximum input/output elapsed time interval that a server associated with the
  computer network can continuously service each of the query statements in turn,
  wherein at the conclusion of a selected time interval ongoing data transfer for a
  selected one of the query statements is interrupted, the associated data subset
  transferred to that point is retained, and the server switches to execution of a
  remaining one of the query statements."
  With respect to Claim 1, an analogous art, Brodersen, teaches:

- "…the desired range accessible using a single login account of a computer
  network associated with the database; [Brodersen, col. 2, lines 14-27 with
  Brodersen, col. 5, lines 30-35 with Hallmark, col. 8, lines 12-23]

- …by logging into the computer network under a different login account for each
  query statement" [Brodersen, col. 2, lines 14-27 with Brodersen, col. 5, lines 30-
  35 with Hallmark, col. 8, lines 12-23].
  With respect to Claim 1, an analogous art, Silberschatz, teaches:

- "...wherein an auto-brake function is initiated that defines a maximum
  input/output elapsed time interval that a server associated with the computer
  network can continuously service each of the query statements in turn, wherein
  at the conclusion of a selected time interval ongoing data transfer for a selected
  one of the query statements is interrupted, the associated data subset
  transferred to that point is retained, and the server switches to execution of a
  remaining one of the query statements" [Silberschatz, p. 97, Fig. 4.1 with
  Silberschatz, p. 99, section 4.2, with Silberschatz, p. 101, section 4.2.2 with
  Silberschatz, p. 103, section 4.2.3].

It would have been obvious to one of ordinary skill in the art at the time of

invention having the teachings of Brodersen, Silberschatz, and Hallmark before him/her

to combine Brodersen and Silberschatz with Hallmark because the inventions are

directed towards accessing computer resources in computers.

Brodersen's and Silberschatz's inventions would have been expected to

successfully work well with Hallmark's invention because the inventions use computers

accessing data in a network. Hallmark discloses a method and apparatus for

implementing parallel operations in a database management system (title) comprising

query processing on a distributed/parallel, partitioned database. However, Hallmark

does not expressly disclose database security/access privilege features or auto-braking

with resumption features. Brodersen discloses a database access method and system

for user role defined access (title) comprising user accounts at login to access

information in a database table. Silberschatz discloses typical operating system

concepts (title) of computers comprising multiprocessing and context switching.

It would have been obvious to one of ordinary skill in the art at the time of

invention having the teachings of Brodersen, Silberschatz, and Hallmark before him/her

to take the login of multiple user accounts from Brodersen and the multiprocessing of

Silberschatz and install them into the invention of Hallmark, thereby offering the obvious

advantage of increased speed and using a simple method of allowing access to a

subset of resources and establishing roles/permissions easily for the authority required.

Including security features in Hallmark would also make the database more resistant to

outside tampering (accidental or not).

In summary, in a shared nothing environment of Hallmark, Brodersen's multiple

accounts having the same access privileges is used to login to the multiple slaves of

Hallmark to complete the queries while multiprocessing/context switching is enabled in

the slaves of Hallmark to make the computers more productive.

Claim 2 can be mapped to Hallmark (as modified by Brodersen and

Silberschatz) as follows: "The method of claim 1, wherein the computerized database

comprises a distributed database portions of which are stored in different locations

linked by a computer network" [Hallmark, Figs. 1A-1D with Hallmark, col. 7, lines 19-23

with Hallmark, col. 7, lines 41-44].

Claim 3 can be mapped to Hallmark (as modified by Brodersen and

Silberschatz) as follows: "The method of claim 1, further comprising exporting the

desired range of data values obtained from the arranging step to a second memory

space" [Hallmark, col. 5, lines 20-33 with Hallmark, col. 6, lines 20-33].

Claim 4 can be mapped to Hallmark (as modified by Brodersen and

Silberschatz) as follows: "The method of claim 1, further comprising using an analysis

routine to analyze the desired range of data values" [Hallmark, col. 1, lines 20-22 with

Hallmark, col. 8, lines 12-34].

Claim 5 can be mapped to Hallmark (as modified by Brodersen and

Silberschatz) as follows: "The method of claim 1, wherein at least one query statement

retrieves data values from the database for a selected data field type, and wherein at

least one other query statement retrieves data values from the data base for the

selected data field type" [Hallmark, col. 5, lines 20-33 with Hallmark, col. 6, lines 20-33].

Claim 9 can be mapped to Hallmark (as modified by Brodersen and

Silberschatz) as follows: "The method of claim 1, wherein the simultaneously executing

step further comprises a resumption of the execution of the selected one of the query

statements to transfer a remaining portion of the associated data subset" [Silberschatz,

p. 97, Fig. 4.1 with Silberschatz, p. 99, section 4.2, with Silberschatz, p. 101, section

4.2.2 with Silberschatz, p. 103, section 4.2.3].

For Claim 11, Hallmark teaches: "A computer system, [Hallmark, Figs. 1A-1D

with Hallmark, col. 7, lines 41-44] comprising:

- a database stored in a first memory space and accessible by a computer;

   [Hallmark, col. 7, lines 41-44 with Hallmark, col. 5, lines 23-34] and

- a query engine stored in a second memory space which, upon execution
  [Hallmark, col. 5, lines 34-44] distributes a desired range of data values to be
  obtained from the database across a plurality of different query statements,
  [Hallmark, col. 5, lines 10-15 with Hallmark, col. 6, lines 20-33 with Hallmark, col.
  8, lines 12-16] simultaneously executes the plurality of query statements to
  access the database and transfer associated data subsets into a third memory
  space, and arranges the associated data subsets to form the desired range of
  data values" [Hallmark, col. 5, lines 10-15 with Hallmark, col. 6, lines 20-33].
  Hallmark discloses the above limitations but does not expressly teach:

- "...wherein the query engine further initiates an auto-brake function that limits
  input/output transfer elapsed time to a maximum value during said transfers of
  the associated data subsets into the third memory space so that said transfers of
  the associated data subsets are interrupted and the associated data subsets are
  retained in the third memory space when the maximum value is reached, wherein
  the desired range is accessible using a single login account of a computer
  network associated with the database, and wherein the plurality of query
  statements are executed by logging into the computer network under a different
  login account for each query statement."

  With respect to Claim 11, an analogous art, Silberschatz, teaches:

- "...wherein the query engine further initiates an auto-brake function that limits
  input/output transfer elapsed time to a maximum value during said transfers of
  the associated data subsets into the third memory space so that said transfers of

the associated data subsets are interrupted and the associated data subsets are

retained in the third memory space when the maximum value is reached"

[Silberschatz, p. 97, Fig. 4.1 with Silberschatz, p. 99, section 4.2, with

Silberschatz, p. 101, section 4.2.2 with Silberschatz, p. 103, section 4.2.3].

With respect to Claim 11, an analogous art, Brodersen, teaches:

- "...wherein the desired range is accessible using a single login account of a

   computer network associated with the database, and wherein the plurality of

   query statements are executed by logging into the computer network under a

   different login account for each query statement" [Brodersen, col. 2, lines 14-27

   with Brodersen, col. 5, lines 30-35 with Hallmark, col. 8, lines 12-23].

It would have been obvious to one of ordinary skill in the art at the time of

invention having the teachings of Brodersen, Silberschatz, and Hallmark before him/her

to combine Brodersen and Silberschatz with Hallmark because the inventions are

directed towards accessing computer resources in computers.

Brodersen's and Silberschatz's inventions would have been expected to

successfully work well with Hallmark's invention because the inventions use computers

accessing data in a network. Hallmark discloses a method and apparatus for

implementing parallel operations in a database management system (title) comprising

query processing on a distributed/parallel, partitioned database. However, Hallmark

does not expressly disclose database security/access privilege features or auto-braking

with resumption features. Brodersen discloses a database access method and system

for user role defined access (title) comprising user accounts at login to access

information in a database table. Silberschatz discloses typical operating system concepts (title) of computers comprising multiprocessing and context switching.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Brodersen, Silberschatz, and Hallmark before him/her to take the login of multiple user accounts from Brodersen and the multiprocessing of Silberschatz and install them into the invention of Hallmark, thereby offering the obvious advantage of increased speed and using a simple method of allowing access to a subset of resources and establishing roles/permissions easily for the authority required. Including security features in Hallmark would also make the database more resistant to outside tampering (accidental or not).

In summary, in a shared nothing environment of Hallmark, Brodersen's multiple accounts having the same access privileges is used to login to the multiple slaves of Hallmark to complete the queries while multiprocessing/context switching is enabled in the slaves of Hallmark to make the computers more productive.

Claim 12 can be mapped to Hallmark (as modified by Brodersen and Silberschatz) as follows: "The computer system of claim 11, wherein the computer comprises a server computer, wherein the computer system further comprises a client computer associated with the server computer over a computer network, and wherein the client computer executes the query engine" [Hallmark, Figs. 1A-1D with Hallmark, col. 7, lines 19-23 with Hallmark, col. 7, lines 41-44 with Hallmark, col. 5, lines 23-44].

Claim 13 can be mapped to Hallmark (as modified by Brodersen and Silberschatz) as follows: "The computer system of claim 11, wherein the database

comprises a distributed database so that the first memory space comprises a plurality of

different locations linked by a computer network" [Hallmark, Figs. 1A-1D with Hallmark,

col. 7, lines 19-23 with Hallmark, col. 7, lines 41-44].

Claim 14 can be mapped to Hallmark (as modified by Brodersen and

Silberschatz) as follows: "The computer system of claim 11, wherein the query engine

subsequently exports the desired range of data values to a fourth memory space"

[Hallmark, col. 5, lines 20-33 with Hallmark, col. 6, lines 20-33].

Claim 15's limitation(s) have already been met by Claim 4's limitation(s).

Therefore, Claim 15 is rejected for the same reason(s) as stated above with respect to

Claim 4.

11.   Claims 6, 7, 16, and 17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent No. 5,857,180 (Hallmark et al.) in view of U.S. Patent No.

6,732,100 (Brodersen et al.), in view of "Operating System Concepts" (Silberschatz et

al.), further in view of U.S. Patent No. 6,011,758 (Dockes et al.).

For **Claim 6**, Hallmark (as modified by Brodersen and Silberschatz) teaches: "The

method of claim 1, wherein the desired range of data values comprises."

Hallmark (as modified by Brodersen and Silberschatz) discloses the above

limitation but does not expressly teach: "…manufacturing data associated with

manufacture of a population of products."

With respect to Claim 6, an analogous art, Dockes, teaches: "…manufacturing data associated with manufacture of a population of products" [Dockes, col. 7, lines 12-16 with Dockes, col. 16, lines 15-19 with Dockes, col. 19, lines 12-23].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Dockes with Hallmark (as modified by Brodersen and Silberschatz) because both inventions are directed towards using databases in a client/server fashion.

Dockes's invention would have been expected to successfully work well with Hallmark (as modified by Brodersen and Silberschatz)'s invention because both inventions use databases. Hallmark (as modified by Brodersen and Silberschatz) discloses a method and apparatus for implementing parallel operations in a database management system comprising query processing on a distributed/parallel, partitioned database, however Hallmark (as modified by Brodersen and Silberschatz) does not expressly disclose the specific use of the database for manufacturing data or that the manufacturing data relates to data storage devices. Dockes discloses a system and method for production of compact discs on demand comprising writing CD's using a database of orders.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the specific use (manufacturing CD's/storage devices) and the manufacturing data from Dockes and install it into the invention of Hallmark (as modified by Brodersen and Silberschatz), thereby offering the obvious advantage of being able to use Hallmark (as modified by Brodersen and Silberschatz)'s invention for a data

processing system that writes CD's for requesting users so they may obtain the CD

requested in Dockes.

Claim 7 can be mapped to Hallmark (as modified by Brodersen, Silberschatz,

and Dockes) as follows: "The method of claim 6, wherein the products comprise data

storage devices" [Dockes, col. 7, lines 12-16 with Dockes, col. 19, lines 12-23].

Claims 16 and 17's limitation(s) have already been met by Claims 6 and 7's

limitation(s), respectfully. Therefore, Claims 16 and 17 are rejected for the same

reason(s) as stated above with respect to Claims 6 and 7, respectfully.

12.   Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Patent No. 5,857,180 (Hallmark et al.) in view of U.S. Patent No. 6,732,100

(Brodersen et al.) in view of "Operating System Concepts" (Silberschatz et al.), in view

of U.S. Patent No. 6,011,758 (Dockes et al.), further in view of "Man: Crontab(5)"

(Crontab).

For **Claim 10**, Hallmark (as modified by Brodersen and Silberschatz) teaches:

"The method of claim 1, wherein the distributing, simultaneously executing and

arranging steps."

Hallmark (as modified by Brodersen and Silberschatz) discloses the above

limitation but does not expressly teach: "are carried out on a repetitive, daily basis to

obtain data relating to an ongoing manufacturing process."

With respect to Claim 10, an analogous art, Crontab, teaches: "daily basis"

[Crontab, page 3, from the top through "Example Cron File"].

With respect to Claim 10, an analogous art, Dockes, teaches: "are carried out on a repetitive, to obtain data relating to an ongoing manufacturing process" [Dockes, col. 7, lines 10-16 with Dockes, col. 9, lines 9-13 with Dockes, col. 16, lines 15-19 with Dockes, col. 19, lines 12-23].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Dockes and Crontab with Hallmark (as modified by Brodersen and Silberschatz) because the inventions are directed towards using computers.

Dockes's and Crontab invention would have been expected to successfully work well with Hallmark (as modified by Brodersen and Silberschatz)'s invention because the inventions use computers. Hallmark (as modified by Brodersen and Silberschatz) discloses a method and apparatus for implementing parallel operations in a database management system comprising query processing on a distributed/parallel, partitioned database, however Hallmark (as modified by Brodersen and Silberschatz) does not expressly disclose the specific use of the database for a manufacturing process. Dockes discloses a system and method for production of compact discs on demand comprising writing CD's using a database of orders. Crontab discloses a computer command for daily repetitive execution of a command comprising the ability to execute a command on a daily basis.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the specific use (manufacturing CD's/storage devices) from Dockes and the crontab command from Crontab and install them into the invention of Hallmark (as modified by Brodersen and Silberschatz), thereby offering the obvious advantage of

being able to use Hallmark (as modified by Brodersen and Silberschatz)'s invention for

a data processing system that writes CD's for requesting users so they may obtain the

CD requested in Dockes. The execution of getting an order from the database and

making a job file from it would then be done on at least a daily basis to keep the job

spooling directory relatively full at all times so that there is always at least one job ready

for dispatch. This makes the autonomous system of Dockes more efficient.

Claim 20's limitation(s) have already been met by Claim 10's limitation(s).

Therefore, Claim 20 is rejected for the same reason(s) as stated above with respect to

Claim 10.

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Conclusion

14.   Any prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Applicant is advised that, although not used in the rejections

above, prior art cited on any PTO-892 form and not relied upon is considered materially

relevant to the applicant's claimed invention and/or portions of the claimed invention.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brent S. Stace whose telephone number is 571-272-

8372 and fax number is 571-273-8372. The examiner can normally be reached on M-F

9am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Apu M. Mofiz can be reached on 571-272-4080. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

/B. S./
Examiner, Art Unit 2161

/Apu M Mofiz/
Supervisory Patent Examiner, Art Unit 2161